

Art Unit: 2800

CLMPTO

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1.(AMENDED) An apparatus comprising:

a first interface circuit operative to receive a first analog signal representing a voice signal from an end user telephone and convert the first analog signal to a digital signal in a first format;

a data processor operative to convert the digital signal into a second digital format, the second digital format comprising asynchronous transfer mode adaptation layer type 1 format; and

a DSL modem operative to convert the digital signal in the second format into a DSL analog signal for transport over a physical connection and subsequent routing by an ATM switch

2.(AMENDED) The apparatus of claim 1 further comprising a data signal interface for interfacing to a computer to provide both voice and data services over the same DSL physical connection.

3. The apparatus of claim 1 wherein the data processor further comprising a voice path/voice channel generation function.

4. The apparatus of claim 1 wherein the data processor communicates with a service control point to obtain call set up information.

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5.(AMENDED) An apparatus for providing call management in a digital subscriber loop environment, comprising:

an interface capable of receiving ATM cells from a customer premises equipment and an ATM switch coupled to a voice network switching equipment; and

a processor operative to receiving a connection request data packet from the customer premises equipment and for dynamically setting up a virtual circuit path from the ATM switch to the voice network switching equipment in response to the connection request data packet from the customer premises equipment.

6. The apparatus of claim 5 wherein the apparatus sends a second data packet back to the customer premises equipment containing connection information about the virtual circuit path setup between the ATM switch and the voice network switching equipment.

7. The apparatus of claim 1 wherein the apparatus first determines whether a communication slot between the ATM switch and the voice network switching equipment is available before dynamically setting up the virtual circuit path.

8. The system of claim 5 wherein the connection request data packet is an ATM cell.

9. The system of claim 8 wherein the ATM cell is an ATM adaptation layer 1 cell.